PRACTICAL –4

Aim: - Arduino programming with serial monitor, Temperature sensor.

Arduino function

- Serial.begin()
- Serial.end()
- Serialread()
- Serialwrite()
- Serial.print()
- Serial.println()
- Serial.available()

Experiment

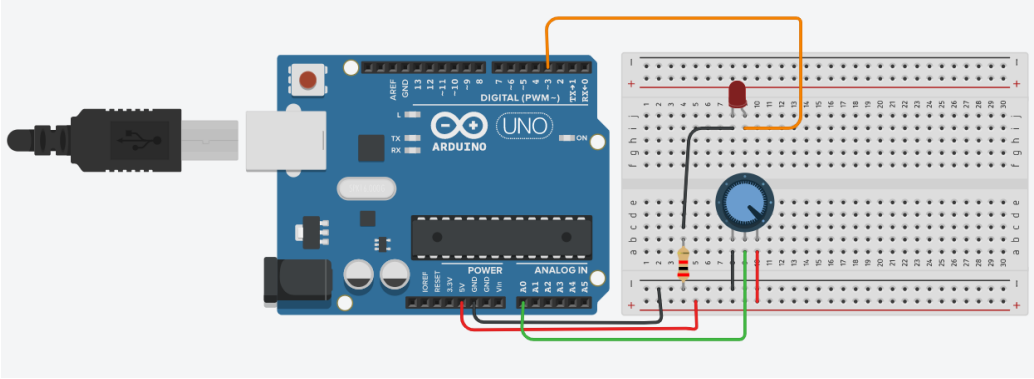
1. Increase and decrease the brightness of LED using potentiometer and display the voltage level on serial monitor

2. Read the current temperature of room and display it on serial monitor

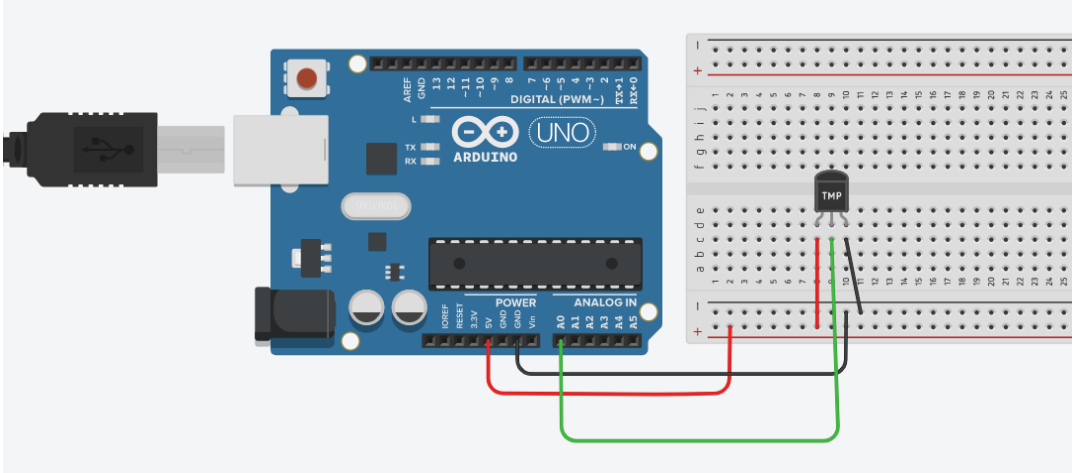
3. Read the current temperature of room and turn on RGB Led with specific colour according to current temperature value
   a. If temperature more than 50 C° then turn on RGB LED with RED colour
   b. If temperature between 0 C° to 50 C° then turn on RGB LED with GREEN colour
   c. If temperature less than 0 C° then turn on RGB LED with BLUE colour

Connection for Experiment

1. **Circuit for Increase and decrease the brightness of LED using Potentiometer and display in serial monitor**



2. **Read the current temperature of room and display it on serial monitor**



3. **Read the current temperature of room and turn on RGB Led with specific colour according to current temperature value**